

CONTRIBUTION TO THE LICHEN FLORA OF URUGUAY XV.
ADDITIONAL RECORDS TO THE RIO URUGUAY LICHEN FLORA.

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The present paper is the second with reference to the lichen flora along the banks of Uruguay River in the Artigas and Salto Departments. Apart from the collection sites already mentioned in a former paper (Osorio 1978) materials collected from the following localities situated to the South of Salto Grande Dam are also included here:

"Arroyo San Antonio and Río Uruguay": marginal forests in the confluence of both streams, zone situated a few kms. to the North of Salto city.

"Salto Chico": locality on Uruguay River to the northernmost end of Salto city,

"Piedra Alta", "Monumento a H. Quiroga" and "La Caballada": all of them collection sites situated on the bank of Uruguay River in the urban area of Salto City.

Besides the materials collected by the author and preserved in his private herbarium (numbers between parenthesis), some specimens belonging to the Herbarium, Museo Nacional de Historia Natural, Montevideo (MVM) have been included.

Notwithstanding a small number of species have not been identified yet because they are little-known or critical groups. They will be the object of a third note including the general considerations on the lichen flora of the studied area.

Acarospora boliviana Magn.

Salto: Salto, Monumento a H. Quiroga, stones on the riverside (6672)
Anthracotheicum goniostomum Müll. Arg.

Artigas: Arroyo El Tigre and Río Uruguay, on shrubs (7279.a); Estancia El Tigre, trunk of Myrtaceae (7230).

Salto: Arroyo Itapeby and Río Uruguay, on Pouteria salicifolia (6756); Piroto, on shrubs (6739, 6743)

Bacidia alutacea (Kremp.) Zahlbr.

Salto: Arroyo San Antonio and Río Uruguay, on shrubs (6696).
Buellia subisabellina Zahlbr.

Artigas: Arrocería Conti, on Peltophorum dubium (7434, 7436).
Calicium americanum R. Sant.

Salto: Salto Grande, Estancia Galvarini, on dry trunk of Melia azedarach (6715). Thanks are given to Dr. Leif Tibell who gently confirmed our identification.

Caloplaca cinnabarina (Ach.) Zahlbr.

Salto: Salto, Monumento a H. Quiroga, stones on the riverside (6673); Piedra Alta, stones on the riverside (6649).

C. crocea (Kremp.) Half. & Poelt.

Salto: Arroyo San Antonio and Río Uruguay, on shrubs (6667); Piro-
tto, on trees, vid. Hafellner (6738)

C. erythrantha (Tuck.) Zahlbr.

Salto: Arroyo San Antonio and Río Uruguay, on shrubs (6670).

C. festiva (Fr.) Zw.

Salto: Salto, La Caballada, stones on a old wall (6645), Monumento
a H. Quiroga, on a old wall (6671); Piedra Alta, sandstone
on the riverside (6648).

C. mülleri (Vain.) Zahlbr.

Salto: Salto Grande, Parador H. Quiroga, stones in a meadow (6696).
Candelaria concolor (Dicks.) Stein.

Salto: Arroyo San Antonio and Río Uruguay, on shrubs (6668); Salto
Chico, on Melia azedarach (6659).

C. fibrosa (Fr.) Müll. Arg.

Salto: Salto, Piedra Alta, on shrubs (6654).

Candelariella vitellina (Ehrh.) Müll. Arg.

Salto: Salto Grande, Parador H. Quiroga, on sandstone (6693). New
to Uruguay.

Chiodecton quassiaecolum (Fée) Müll. Arg. var. plurisepta Räs.

Artigas: Estancia El Tigre, on trunk of Myrtaceae, with Arthonia sp.
(7232). Formerly known in Uruguay only from Montevideo
Department (Type locality, Räsänen 1942).

Dermatocarpon corticolum Räs.

Artigas: Estancia El Tigre, en Erythrina crista-galli (7218), on
Ruprechtia salicifolia (7223).

Formerly known only from the type locality in the same
Department (Räsänen 1939).

Diploschistes actinostomus (Pers.) Zahlbr.

Salto: Salto Grande, Parador H. Quiroga, stones in a meadow (6691,
6702).

Dirinaria applanata (Fée) Awas.

Artigas: Arroyo El Tigre and Río Uruguay, on Ficus (7300); Estan-
cia El Tigre, on Melia azedarach (7216).

Salto: Salto Grande, Estancia Galvarini, on Melia azedarach (6720);
Parador H. Quiroga, on trees (6713).

D. confluens (Fr.) Awas.

Artigas: Arrocería Conti, on Pirus communis (7417).

Glyphis cicatricosa (Ach.) Vain. f. confluens (Zenk.) Zahlbr.

Salto: Arroyo San Antonio and Río Uruguay, on shrubs (6664); Piro-
tto, on trees (6742).

Graphis lineola Ach.

Artigas: Arrocería Conti, on Peltophorum dubium (7435)

G. l. var. marginata (Mey & Flot.) Zahlbr.

Salto: Arroyo Itapeby and Río Uruguay, on Pouteria salicifolia
(6758).

Haematomma puniceum (Ach.) Mass. var. subinnatum Malme.

Salto: Salto Grande, Estancia Galvarini, on Melia azedarach (6725)
Heterodermia albicans (Pers.) Swinsc. & Krog.

Artigas: Arroyo El Tigre and Río Uruguay, on Erythrina crista-galli
(7290); Estancia El Tigre, on Ficus (7194), on mossy trunk
(7236).

- Salto: Salto Grande, Parador H. Quiroga, on trunks (6710).
H. diademata (Tayl.) Awas.
- Artigas: Arroyo El Tigre and Río Uruguay, on Erythrina crista-galli (7284, 7289), growing on laciniae of Ramalina celastri on Acacia caven (7286); Estancia El Tigre, on Prosopis nandubay (7189), on mossy trunks (7235).
- Salto: Salto, La Caballada, on shrubs (6641), Piedra Alta, on shrubs (6652); Salto Grande, Parador H. Quiroga, on trunk (6707).
H. flabellata (Fée) Awas.
- Salto: Salto Grande, Parador H. Quiroga, on trees (6712).
Lecanora fusca Müll. Arg.
- Salto: Salto, Piedra Alta, stones on the riverside (6650).
Lecidea montevidensis Müll. Arg.
- Salto: Salto, La Caballada, stones on an old wall (6644), Monumento a H. Quiroga, stones on the riverside (6674); Salto Grande, Parador H. Quiroga, stones in a meadow (6687).
L. oreinodes (Korb) Web. & Hertel
- Artigas: Estancia El Tigre, stone in a meadow (7174 a & b).
- Salto: Salto, Piedra Alta, stones on the riverside (6646); Salto Grande, Parador H. Quiroga, stones in a meadow (6692).
Leptogium austroamericanum (Malme) Dodge.
- Artigas: Arrocerá, Conti, on Ficus (7399); Arroyo El Tigre and Río Uruguay, on Erythrina cristagalli (7291); Estancia El Tigre, on Phytolacca dioica (7201).
- Salto: Piroto, on Erythrina crista-galli (6754).
L. cyanescens (Ach.) Körb.
- Artigas: Arroyo El Tigre and Río Uruguay, on trees (7277); Estancia El Tigre, on Ficus (7195).
L. marginellum (Sw.) S. Gray.
- Artigas: Estancia El Tigre, Arroyo Mandiyú, on Pouteria salicifolia Marchesi s.n. (MVM 17672). New to Uruguay.
L. tuckermani Dodge.
- Artigas: Estancia El Tigre, on mossy trunk (7226).
Ochrolechia pallescens (L.) Mass.
- Artigas: Arrocerá Conti, on Citrus aurantium (7414), on Pirus communis (7418).
- Salto: Piroto, on trees (6744).
Opegrapha bonplandi Fée var. imitans Redgr.
- Artigas: Arroyo El Tigre and Río Uruguay, on Peltophorum dubium (7265). New to Uruguay.
O. lichenoides Pers. var. octomera Redgr.
- Salto: Arroyo Itapeby and Río Uruguay, on Pouteria salicifolia (6757). New to Uruguay.
Parmelia borrierioides Nyl.
- Artigas: Estancia El Tigre, on mossy trunk (7234).
P. canaliculata Lynge
- Salto: Arroyo Itapeby and Río Uruguay, on shrubs (6763).
P. hypoleucites Nyl.
- Salto: Salto, Piedra Alta, on shrubs (6653).
P. microsticta Müll. Arg.

- Salto: Arroyo Itapeby and Río Uruguay, on shrubs (6764).
P. rudecta Ach.
- Artigas: Estancia El Tigre, on trunk of Myrtaceae (7329).
Parmelina consors (Nyl.) Hale
- Salto: Salto, Piedra Alta, on trees (6655).
Parmotrema austrosinense (Zahlbr.) Hale
- Salto: Salto, Piedra Alta, on shrubs (6656, 6657); Salto Grande, Estancia Galvarini, on *Melia azedarach* (6718).
P. cetratum (Ach.) Hale
- Salto; Salto, Piedra Alta, on shrubs (6658).
P. praesorediosum (Nyl.) Hale
- Artigas: Estancia El Tigre, on trees (7253).
P. subcaperatum (Kremp.) Hale
- Artigas: Arrocerá Conti, on wooden fence post (7402); Arroyo El Tigre and Río Uruguay, on *Ficus* (7301).
Peltula euploca (Ach.) Wetm.
- Salto: Salto Grande, Parador H. Quiroga, on basaltic stones in a meadow (6684).
Pertusaria megapotamica Magn.
- Artigas: Arrocerá Conti, on *Peltophorum dubium* (7431)
P. superans Müll. Arg.
- Artigas: Estancia El Tigre, on shrubs (7225).
Phaeographina arechavaletae Müll. Arg.
- Artigas: Arrocerá Conti, on *Pirus communis* (7419).
Physcia alba (Fée) Müll. Arg. var. *obsessa* (Mont.) Lyngé
- Artigas: Arrocerá Conti, on *Acacia farnesiana* (7447), on *Peltophorum dubium* (7440); Estancia El Tigre, on *Melia azedarach* (7206).
- Salto: Arroyo Itapeby and Río Uruguay, on shrubs (6765), Arroyo San Antonio and Río Uruguay, on shrubs (6663); Piroto, on *Erythrina crista-galli* (6752).
P. aipolia (Ehrh.) Hampe
- Artigas: Arroyo El Tigre and Río Uruguay, on *Erythrina crista-galli* (7292); Estancia El Tigre, on *Prosopis nandubay* (7190), on *Ficus* (7196, 7197), on *Parkinsonia aculeata* (7220), on mossy trunks (7228). New to Uruguay.
P. crispa Nyl.
- Salto: Salto Grande, Estancia Galvarini, on *Melia azedarach* (6716).
Physciopsis syncolla (Tuck.) Poelt
- Artigas: Río Uruguay, Isla Zapallo, on trees (7389).
- Salto: Arroyo San Antonio and Río Uruguay, on shrubs (6666); Salto Chico, on *Melia azedarach* (6662); Salto Grande, Estancia Galvarini, on *Melia azedarach* (6723).
Porina subpungens Malme
- Artigas: Arroyo El Tigre and Río Uruguay, on *Scutia buxifolia* (7262) *Peltophorum dubium* (7264, 7276), on shrubs (7269); Estancia El Tigre, trunk of trees (7241); Río Uruguay, Isla Zapallo, on trees (7385). New to Uruguay.
Pseudoparmelia exornata (Zahlbr.) Hale
- Artigas: Arrocerá Conti, on *Citrus aurantium* (7411), on *Pirus communis* (7420). Both collections have been already published

erroneously identified as Pseudoparmelia rutidota (Osorio 1978).

Pyrenula brunnea Fée.

Artigas: Río Uruguay, Isla Zapallo, on trees (7390). New to Uruguay
P. commixta Malme.

Artigas: Arroyo El Tigre and Río Uruguay, on shrubs (7279.b), on
Myrtaceae (7275).

Pyxine cocoes (Sw.) Nyl.

Artigas: Estancia El Tigre, on Piptadenia rigida (7199), on Phyto-
lacca dioica (7200), on Melia azedarach (7207).

P. endoleuca (Müll. Arg.) Vain.

Artigas: Estancia El Tigre, on Parkinsonia aculeata (7221).

P. pringlei Imsh.

Artigas: Arrocería Conti, on wooden fence post (7405), Arroyo El Ti-
gre and Río Uruguay, on Ficus (7297); Estancia El Tigre,
on Prosopis nandubay (7177), on Piptadenia rigida (7198),
on Melia azedarach (7214), on Myrtaceae (7231).

Salto: Arroyo San Antonio and Río Uruguay, on shrubs (6665); Salto,
La Caballada, on Melia azedarach (6643); Salto Chico, on Me-
lia azedarach (6660); Salto Grande, Estancia Galvarini, on
Melia azedarach (6726); Piroto, on trees (6740).

P. subcinerea Stirt.

Artigas: Arroyo El Tigre and Río Uruguay, on Ficus (7296).

Salto: Piroto, on trees (6734).

Ramalina celastri (Spreng.) Krog & Swinsc.

Artigas: Arrocería Conti, on Melia azedarach (7448), on Peltophorum
dubium (7432); Estancia El Tigre, on shrubs (7248).

Salto: Arroyo Itapeby and Río Uruguay, on shrubs (6755); Salto, Pie-
dra Alta, on shrubs (6651).

R. complanata (Sw.) Ach.

Artigas: Arrocería Conti, on Citrus aurantium (7409), on Pirus com-
munis (7425), on Peltophorum dubium (7433), on Melia aze-
darach (7449); Estancia El Tigre, on Prosopis nandubay
(7181, 7182), on Melia azedarach (7213), on shrubs (7256).

Salto: Arroyo Itapeby and Río Uruguay, on shrubs (6759); Piroto,
on Erythrina crista-galli (6732); Salto Grande, Estancia Gal-
varini, on Melia azedarach (6717).

R. prolifera Tayl.

Artigas: Estancia El Tigre, on Acacia farnesiana (7173).

Salto: Salto Grande, Parador H. Quiroga, on shrubs (6709).

Rinodina connectens Malme

Artigas: Arroyo El Tigre and Río Uruguay, on Scutia buxifolia (7266)

R. conspersa Müll. Arg.

Salto: Salto Grande, Parador H. Quiroga, stones in a meadow (6705).

R. intrusa (Kremp. ap. Nyl.) Malme

Artigas: Arrocería Conti, on Acacia farnesiana (7443).

R. megapotamica Malme

Artigas: Río Uruguay, Isla Zapallo, on tree (7391). New to Uruguay.

Sticta variabilis (Bory) Ach.

Artigas: Río Uruguay, Isla Zapallo, on tree trunk, Castiglioni s.n.
(MVM 17.909).

Strigula elegans (Fée) Müll. Arg.

Artigas: Arroyo El Tigre and Río Uruguay, leaves of Casearea (7273, 7274).

Xanthoparmelia congensis (Stizb.) Hale

Salto: Salto Grande, Parador H. Quiroga, on sandstone (6689, 6690)

SUMMARY

Seventy lichen species collected on the banks of the Uruguay River in the Artigas and Salto Departments are listed. The following species are added to the Uruguayan liche flora: Candelariella vite-llina, Leptogium marginellum, Opegrapha bonplandi var. imitans, O. lichenoides var. octomera, Physcia aipolia, Porina subpungens, Pyrenula brunnea and Rinodina megapotamica.

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